#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

14 CFR Part 39 [66 FR 22913 5/7/2001]

[Docket No. 99-SW-27-AD; Amendment 39-12217; AD 2001-09-11]

**RIN 2120-AA64** 

Airworthiness Directives; Bell Helicopter Textron, Inc. Model 412 Helicopters and Agusta S.p.A. Model AB412 Helicopters

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD) that applies to certain serial-numbered Bell Helicopter Textron, Inc. (Bell) Model 412 helicopters and Agusta S.p.A. (Agusta) Model AB412 helicopters. That AD currently requires a temporary reduction of the never-exceed velocity (Vne) limitation until an inspection of the tail rotor yoke (yoke) assembly for fatigue damage and installation of a redesigned yoke flapping stop are accomplished. Recurring periodic and special inspections to detect occurrences of yoke overload are also required. This amendment requires the same actions as the previous AD but expands the applicability of the AD to all Bell Model 412, 412CF, 412EP, and Agusta Model AB412 helicopters. This amendment is prompted by the determination that the unsafe condition exists on all Bell Model 412 and all Agusta Model AB412 helicopters, regardless of serial number. The actions specified by this AD are intended to prevent static and dynamic overload damage to the yoke that could result in loss of the tail rotor and subsequent loss of control of the helicopter.

**DATES:** Effective June 11, 2001.

The incorporation by reference of certain publications listed in the regulations was approved previously by the Director of the Federal Register as of April 8, 1998 (63 FR 14026, March 24, 1998).

**ADDRESSES:** The service information referenced in this AD may be obtained from Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101, telephone (817) 280-3391, fax (817) 280-6466 for the Bell Model 412 helicopters; and Agusta S.p.A., 21017 Cascina Costa di Samarate (VA), Italy, Via Giovanni Agusta 520, telephone 39 (0331) 229111, fax 39 (0331) 229605-222595 for the Agusta Model AB412 helicopters. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Uday Garadi, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5123, fax (817) 222-5961.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 98-07-03, Amendment 39-10421 (63 FR 14026, March 24, 1998), which applies to certain serial-numbered Bell Model 412 helicopters and Agusta Model AB412 helicopters, was published in the **Federal Register** on January 22, 2001 (66 FR 6494).

That action proposed to require a reduction of the Vne limitation until an inspection of the yoke assembly for static and dynamic overload damage and installation of a redesigned yoke flapping stop are accomplished and includes periodic and special inspections to detect a yoke overload. A correction to a technical bulletin date referenced in that AD was issued on July 10, 1998 (63 FR 38742, July 20, 1998).

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed except for clarifying changes that were made in paragraph (a) to better explain the intent of the AD and editorial changes in paragraph (d). The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

The FAA estimates that 135 helicopters of U.S. registry will be affected by this AD, that it will take approximately 6.5 work hours per helicopter to install the placard, inspect the yoke assembly, and install the yoke. Required parts will cost approximately \$511 per helicopter. Based on these figures, the total cost impact of this AD on U.S. operators is estimated to be \$121,635.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

2. Section 39.13 is amended by removing Amendment 39-10421 (63 FR 14026, March 24, 1998, and 63 FR 38742, July 20, 1998), and by adding a new airworthiness directive (AD), Amendment 39-12217, to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service Washington, DC

U.S. Department of Transportation Federal Aviation Administration

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2001-09-11 BELL HELICOPTER TEXTRON, INC. and AGUSTA S.p.A.:** Amendment 39-12217. Docket No. 99-SW-27-AD. Supersedes AD 98-07-03, Amendment 39-10421, Docket No. 97-SW-58-AD.

**Applicability:** Bell Helicopter Textron, Inc. Model 412, 412CF, and 412EP helicopters and Agusta S.p.A. Model AB412 helicopters, with tail rotor yoke assembly, part number (P/N) 212-011-702-all dash numbers, installed, certificated in any category.

Note 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent static and dynamic overload damage to the tail rotor yoke (yoke) that could result in loss of the tail rotor and subsequent loss of control of the helicopter, accomplish the following:

- (a) Before further flight, review the historical records of the yoke assembly for any static or dynamic overload damage that could have imposed a bending load on the yoke. The damage may not have required replacing the yoke assembly; for example, an incident in which a damaged tail rotor blade was replaced due to a blade strike. If the records indicate that overload damage may have occurred, replace the yoke with an airworthy yoke.
- (b) Before further flight, unless the requirements of paragraph (c) of this AD have been accomplished previously:
- (1) Install a Never Exceed Velocity (Vne) red line at 120 knots indicated airspeed (KIAS) on the pilot and copilot airspeed indicators using red tape or paint and a slippage indicator on the instrument case and glass.
- (2) Install a placard made of material that is not easily erased, disfigured, or obscured on the instrument panel in clear view of the pilot and copilot:

"Observe temporary Maximum Never Exceed (Vne) airspeed red line (marked at 120 knots indicated airspeed (KIAS)). Vne is 20 KIAS less than the value presented on the airspeed limitation placard for each ambient condition."

(3) Insert the applicable Bell Helicopter Textron (BHT) 412 Temporary Revision, dated August 16, 1996, into the Model 412 Rotorcraft Flight Manual (RFM) or the applicable section of Agusta AB412 Temporary Revision No. 2, dated April 17, 1997, into the Model AB412 RFM.

#### (c) Within 180 calendar days:

- (1) Remove yoke assembly, P/N 212-011-702-all dash numbers, and replace it with an airworthy yoke assembly, P/N 212-011-702-all dash numbers, with zero hours time-in-service (TIS), or an airworthy yoke (regardless of TIS) that has passed a one-time x-ray diffraction inspection in accordance with BHT Alert Service Bulletin (ASB) 412-96-89, Revision A, dated October 17, 1997; BHT ASB 412CF-96-01, dated September 3, 1996; or Agusta Bolletino Tecnico (Technical Bulletin) No. 412-65, dated April 17, 1997, whichever is applicable.
  - (2) Install an airworthy tail rotor flapping stop, P/N 212-011-713-103.
- (3) After the requirements of paragraphs (c)(1) and (c)(2) of this AD are accomplished, remove the 120 KIAS redline from the pilot and copilot airspeed indicators; remove the Vne airspeed restriction placard; and remove the BHT 412 Temporary Revision, dated August 16, 1996; BHT ASB 412CF-96-01, dated September 3, 1996; or Agusta AB412 Temporary Revision No. 2, as applicable, from the RFM.
- (d) After accomplishing the requirements of paragraph (c) of this AD, at intervals not to exceed 25 hours TIS, inspect the yoke assembly and tail rotor flapping stop (stop) in accordance with Part III, Recurring 25-Hour Special Inspection and Conditional Inspection Requirement, of BHT ASB 412-96-89, Revision A, dated October 17, 1997; BHT ASB 412CF-96-01, dated September 3, 1996; or Agusta Technical Bulletin No. 412-65, dated April 17, 1997, as applicable. Replace any unairworthy yoke assembly or stop with an airworthy yoke assembly or stop before further flight.
- (e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Regulations Group, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Regulations Group.
- Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Regulations Group.
- (f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter at airspeeds not to exceed 120 KIAS to a location where the requirements of this AD can be accomplished.
- (g) The inspections and installations shall be done in accordance with Bell Helicopter Textron Alert Service Bulletin 412-96-89, Revision A, dated October 17, 1997; Bell Helicopter Textron Alert Service Bulletin 412CF-96-01, dated September 3, 1996; or Agusta Bolletino Tecnico (Technical Bulletin) No. 412-65, dated April 17, 1997. The incorporation by reference of those documents was approved previously by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51, as of April 8, 1998 (63 FR 14026, March 24, 1998). Copies may be obtained from Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101, telephone (817) 280-3391, fax (817) 280-6466; or Agusta, 21017 Cascina Costa di Samarate (VA), Via Giovanni Agusta 520, telephone (0331) 229111,

fax (0331) 229605-222595. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on June 11, 2001.

Note 3: The subject of this AD is addressed in Registro Aeronautico Italiano (Italy) AD 97-223, dated August 1, 1997.

**FOR FURTHER INFORMATION CONTACT:** Uday Garadi, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5123, fax (817) 222-5961.

Issued in Fort Worth, Texas, on April 20, 2001. Larry M. Kelly, Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.